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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/557,690	04/25/2000	Hung Nguyen	68702	8537

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EXAMINER

RAMPURIA, SHARAD K

ART UNIT PAPER NUMBER

2683

DATE MAILED: 05/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/557,690

Applicant(s)

NGUYEN ET AL.

Examiner

Sharad Rampuria

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim 1, is rejected under 35 U.S.C. 102 (e) as being anticipated by Hwang.

1. Regarding claim 1, Hwang disclosed a receiver capable of receiving a plurality of different codes (CAP code) at a plurality of different frequencies, comprising: an input device (10; Fig.2) for selection among a plurality of different codes and a plurality of different bit patterns (Col.2; 60- Col.3; 5 & Col.3; 50-60) an antenna for receiving a receiver actuation signal (Fig.2); digital frequency control circuitry (Col.3; 35-45); a controller (13; Fig.2) for comparing said received receiver

actuation signal to said code and bit pattern selections; and output circuitry for responding to the receipt of a receiver actuation signal that matches said code and bit pattern selections. (Col.3; 58- Col.4; 7; Fig.2)

Claims 6-9 & 11-13, are rejected under 35 U.S.C. 102 (e) as being anticipated by Heitschel et al.

2. Regarding claim 6, Hietschel disclosed a radio frequency receiver (41; Fig.2) for receiving a plurality of actuation signals from a movable barrier operator transmitter, each receiver being capable of receiving a plurality of coded signals at a plurality of different frequencies, comprising: first and second user-selectable input devices (19; Fig.2) for selecting a specified code and a specified frequency for receiving said actuation signals (Col.3; 11-18); a controller (38; Fig.2) coupled to said input devices for processing said code and frequency selections and outputting data responsive to said input; and receiver circuitry responsive to said controller output data for receiving particular actuation signals at one frequency and receiving particular other actuation signals at another frequency. (Col.3; 1-18)

3. Regarding claim 7, Hietschel disclosed the radio frequency receiver of claim 6, wherein said first user-selectable input device comprises a multi position switch (23; Fig.2) which determines a particular code to be received as said actuation signal based upon the position of said multi-positioned switch. (Col.3; 14-18)

4. Regarding claim 9, Hietschel disclosed the radio frequency receiver of claim 8, wherein said controller processes the code and bit sequence selections (Fig.5) from said input devices and outputs data according to said input to said receiver circuitry causing said receiver circuitry to receive particular data at one frequency and other data at another frequency. (Col.3; 19-30)

5. Regarding claim 11, Hietschel disclosed a method of receiving a receiver actuating signal comprising the steps of: providing a receiver having multiple input devices coupled to a microprocessor (44; Fig.2) and receiver circuitry; adjusting said receiver circuitry to receive a particular code at a particular frequency based on the position of said multiple input devices and output from said microprocessor; and receiving said receiver actuating signal.(Col.3; 1-18)

6. Regarding claim 12, Hietschel disclosed the method of claim 11 wherein one of said multiple input devices is a multi-positioned switch (23; Fig.2) which determines the code to be received as said receiver actuating signal based upon the position of said multi-positioned switch. (Col.3; 14-18)

Claim 10, is rejected under 35 U.S.C. 102 (e) as being anticipated by Holmes.

7. Regarding claim 10, Holmes disclosed a method of digitally controlling the frequency of a receiver comprising the steps of: providing a bandpass filter (Fig.2A; Col.7; 26-37); providing a signal diode (Fig.2A; Col.7; 26-37)

connecting additional discrete components to said bandpass filter; providing a controller(26; Fig.2A; Col.8; 36-43) for controlling the operation of said signal diode to alter the discrete component makeup of the bandpass filter to adjust frequency; and outputting signals to said diode to alter the bandpass filter frequency. (Col.8; 44-54)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Holmes.

8. Regarding Claim 2, Hwang discloses all the particulars of the claim except a diode and bandpass filter. However, Holmes teaches in an analogous art, that the receiver of claim 1 wherein said digital frequency control circuitry comprises a signal diode (Fig.2A; Col.7; 26-37) capable of adding and removing discrete components from a bandpass filter (Fig.2A; Col.7; 26-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a diode and bandpass filter in order to improve filtering the incoming frequency.

Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Schulze.

9. Regarding Claim 3, Hwang discloses all the particulars of the claim except a multiposition switch. However, Schulze teaches in an analogous art, that the receiver of claim 2 wherein said input device for selecting among a plurality of different codes is a multiposition switch. (220; Fig.2; Col.6; 50-65) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a multiposition switch in order to switching different codes.

10. Regarding Claim 4, Hwang discloses all the particulars of the claim except a DIP switch. However, Schulze teaches in an analogous art, that the receiver of claim 2 wherein said input device for selecting among a plurality of different bit patterns is a DIP switch. (DIL; 210; Fig.2; Col.6; 50-65) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a DIP switch in order to switching different bit patterns.

11. Regarding claim 8, Hwang disclosed all the particulars of the claim except a DIP switch. However, Schulze teaches in an analogous art, that the radio frequency receiver of claim 7, wherein said second user-selectable input device comprises a dual in-line packaged switch (DIL; 210; Fig.2; Col.6; 50-65) having a plurality of inner switches which determine a particular bit sequence to be received as said actuation signal based upon the position of said plurality of inner switches.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a DIP switch in order to switching different bit patterns.

12. Regarding claim 13, Hwang disclosed all the particulars of the claim except a DIP switch. However, Schulze teaches in an analogous art, that the method of claim 12 wherein another of said multiple input devices is a dual in-line packaged switch (DIL; 210; Fig.2; Col.6; 50-65) having multiple inner switches which determines a bit pattern to be received as said receiver actuating signal based upon the position of said inner switches. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a DIP switch in order to switching different bit patterns.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Freen.

13. Regarding Claim 5, Hwang discloses, an input device (10; Fig.2) for selection among a plurality of different codes and a plurality of different bit patterns; an antenna for receiving a receiver actuation signal; digital frequency control circuitry (Col.3; 35-45); a controller (13; Fig.2) for comparing said received receiver actuation signal to said code and bit pattern selections; and output circuitry for responding to the receipt of a receiver actuation signal that matches said code and bit pattern selections. (Col.3; 58- Col.4; 7; Fig.2). He fails to a super-regenerative receiver. However, Freen teaches in an analogous art, a super-regenerative receiver (Fig.1; Col.2; 15-22) capable of receiving a plurality of different codes at a plurality

of different frequencies. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a super-regenerative receiver in order to improve signal transmission in a noisy environment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is 703-308-4736. The examiner can normally be reached on Mon-Thu.(8-5:30) alternate Fri.(8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
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SK
May 21, 2002